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Framing SARS and H5N1 as an Issue of National Security in Taiwan: Process, Motivations and Consequences

La construction du SRAS et du H5N1 comme question de sécurité nationale à Taiwan : processus, motivations et conséquences

將SARS、H5N1 設定為台灣國家安全的議題之過程、動機與結果

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Framing SARS and H5N1 as an Issue of National Security in Taiwan: Process, Motivations and Consequences

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Introduction

Infectious disease epidemics can be framed in a variety of ways. Indeed, they may be considered as a public health and social hygiene issue, as a development issue, as a human rights issue, as a risk management issue or as a security threat. However it is framed, this has its proponents—and sometimes opponents—, its discourses and claims, its modalities and mechanisms of response, its objectives as well as direct and indirect consequences. In 2003 when SARS broke out in Taiwan and in 2005 while avian flu (H5N1) was spreading quickly in Asia, Taiwanese authorities decided to consider and present both diseases as 'issues of national security' and consequently adopted responses to these health issues that reflected such framing. This article proposes to examine how SARS and H5N1 were securitized in Taiwan.

We start with an overview of the global securitizing dynamic of infectious diseases which helps to position our study in a broader context and with the presentation of our analytical framework inspired by the current international academic debate related to such phenomenon. Then, in a second part, we assess the process through which specific public health issues, namely SARS and H5N1, became issues of national security in Taiwan by asking the following questions: what kinds of actors were the main initiators of this process in Taiwan (*entrepreneurs* of security)? What are their discourses on epidemics, and what was the concrete materialization of such framing and its direct consequences in terms of epidemic control and prevention? Finally, we underline the factors facilitating the securitization of SARS and H5N1 in Taiwan in order to reveal what might explain the success of this phenomenon.

Securitizing infectious diseases: trends and analytical frameworks

Linking infectious diseases to security

In order to position the framing of infectious diseases as a security issue in Taiwan in a much wider context, it is worth mentioning that for more than 20 years, interested by the role that epidemics might play on security—notably national security—academics, governments, and international institutions have increasingly granted infectious diseases the status of security issues.

At the origin of this process of "securitization"[1] of infectious diseases, one finds the development of an "emerging diseases" campaign in the United States in the late 1980s. This marks the end of a period of optimism about the possibility of the total eradication of infectious diseases worldwide, which had been nourished by the discovery of new vaccines and drugs against infective agents in the first part of the 20th century.[2] While HIV/AIDS, Hepatitis C and E. coli 0157: H7 had already emerged, this campaign gained in both visibility and in scientific authority thanks to the participation of two of its principal leaders, namely Stephen Morse, a virologist, and Joshua Lederberg, a geneticist and microbiologist, and to the publication of the 1992 Institute of Medicine (IOM) report entitled *Emerging Infections: Microbial Threats to Health in the United States* which is considered to have been particularly influential on scientific, political and public perceptions of health and security in America in the 1990s'.[3] Indeed, after conceptualizing the notion of "emerging diseases" and describing the global and microbial causes of disease emergence, the report emphasizes the consequences of such phenomena, notably in terms of national and global security. The report's main objective was to convince security experts and decision-makers that infectious diseases had not disappeared and to support their recommendation in various domains of intervention, namely surveillance, training and research, vaccine and drug development, and behavioral change.[4]

The report was considered as conclusive for many, and the emerging diseases movement's approach rapidly spread through the scientific, public health and medical communities and succeeded in convincing policy and decision makers, security experts, journalists in the United-States and worldwide as well as international organizations such as the WHO.[5] This network of individuals

1. Buzan, Waever, de Wilde 1998: 25.
2. Zylberman 2013: 43-79.
3. King 2004: 66.
4. King 2004: 67.
5. Davies 2008: 297.

and institutions thus played the role of the institutional relay of a scientific vision considering the rise of "emerging infections" as a problem and linking this issue to national and global security. This "emerging diseases worldview"[6] culminated in terms of international visibility and acceptance when the UN Security Council addressed the issue of HIV/AIDS in 2000, and adopted—despite initial opposition from Russia, China and France—Resolution 1308 acknowledging the negative impact of HIV/AIDS on security.[7]

Outbreaks of SARS in 2003 and the threat of H5N1 since 1997 strengthened the influence of the approach worldwide and convinced countries such as Australia, Canada,[8] Singapore, Vietnam, Malaysia, Philippines[9] as well as regional organizations such as the European Union (EU) and the Association of South-East Asian Nations (ASEAN)[10] to grant emerging diseases the status of a 'security issue'. Simultaneously, epistemic communities produced a growing number of scientific books and articles, and developed research programs to conceptualize and illustrate the link between such diseases and security,[11] with the aim of helping decision-makers define the problem and identify policy solutions.

Two other important dynamics have been shaped by, and then incorporated into the "emerging diseases worldview." First, the US government had been examining the biosecurity response to a possible anthrax or smallpox attack since the late 1990s, and this mobilization intensified in the aftermath of 9/11. The local/national consequences of global health and biological events came under the spotlight, reinforcing the idea that assisting other countries to face health-related challenges was in the US national interest. It also highlighted the threat posed to national security by international transportation and trade potentially facilitating the rapid spread of infectious diseases in a globalized world.[12]

The second dynamic is the debate on the impact of infectious diseases on human security. This started with the publication of the 1994 United Nations Development Program (UNDP) Human Development Report which considered that challenges such as global infectious diseases were "critical

6. King 2002: 767.
7. UN Security Council 2000.
8. Davies 2008: 299.
9. Caballero-Anthony 2006.
10. Caballero-Anthony 2008.
11. Among the most representative contributions of such dynamic: CBACI/CSIS 2000; International Crisis Group (ICG) 2001; Chalk 2001; Fidler, Price-Smith, Heymann 2003; IFRI 2005; Garrett 2005; McInnes 2006; Elbe 2007.
12. King 2004: 75-76

pervasive threats to human security," notably because they jeopardize health security as well as many other components of the human security agenda such as economic security, food security and community security.[13] This people-centered approach to security (human security) in the domain of health, as opposed to a state-centered approach (national security),[14] reassured those who had agreed to consider "emerging diseases" as a security issue but who were suspicious of the narrow focus on national security

Assessing the securitization process for infectious diseases

With the aim of determining how and when a specific issue becomes a security issue, securitization theorists in the field of International Relations proposed to "explore the logic of security itself to find out what differentiates security […] from what is merely political."[15] They then concentrated their efforts in assessing the *securitization process* or the process by which an issue is presented as "an existential threat with a saliency sufficient to have substantial political effects."[16] Most of these scholars agreed that five main elements determine a securitization process.

1) The *securitizing actors* who frame an issue as a security issue. These 'entrepreneurs of security'are generally perceived as "accepted voices of security, by having the power to define security"[17] and while it is not always the case, are often government officials, political leaders or lobby groups.

2) They produce a securitizing discourse presenting the specific issue as an *existential threat*. The word "security" *per se* may or may not be used by securitizing actors, but arguments to frame the issue as a threat will be critical.

3) A *referent object* is designated as the potential victim of such an existential threat.[18] This referent object may be the State (national security)[19] or, thanks to the vertical enlargement of the concept of security, it could also be the World (global security), a region (regional security) or individuals (human security).

13. UNDP 1994
14. Lakoff 2008: 106
15. Buzan, Waever, de Wilde 1998: 4-5.
16. Buzan, Waever, de Wilde 1998: 25.
17. Buzan, Waever, de Wilde 1998: 31.
18. Waever 1995: 48.
19. Waever 1995: 48.

4) *Exceptional measures*, different from measures taken in the context of the routine political management of a non-securitized issue, are actually implemented (and not mere rhetoric).

5) Securitization also depends on whether the audience toward which the securitizing discourse is directed, accepts, refuses or resists the issue being framed in this way.[20] As some scholars have underlined: "Security (as with all politics) ultimately rests neither with the objects nor with the subjects but *among* the subjects."[21] Securitization theorists require the effective implementation of exceptional measures and the acceptance of the targeted audience as concrete elements of the securitization process. If no sign of acceptance is found among the targeted audience, they prefer to talk about *securitizing moves*.[22]

Therefore, the process of securitizing a specific issue relies first on "speech acts"[23] or statements that have performative functions: a *securitizing actor* declares that a specific issue represents an *existential threat* toward a *referent object* and that, in the context, it is required to adopt *exceptional measures*. Then, only if the discourse is accepted by the targeted audience and materialized into concrete *exceptional measures*, is it possible to consider the securitization of the specific issue as tangible.

This securitization process has *facilitating conditions*[24] if the speech act is produced by an actor possessing a position of authority to talk about security and when the issue is considered threatening.[25] Political legitimacy; the desire to strengthen control on society, notably in non-democratic countries[26]; the will to retain authority and privilege,[27] as well as pressures from international and/or domestic spheres[28] may represent strong incentives to frame a specific issue as a security issue. The domestic political, social, cultural and economic context of the securitizing actor as well as their position within the international community at that time may influence such a process.[29]

Simultaneously to this international relations framework, the securitization of infectious diseases has also been studied by anthropologists who positioned the securitization of infectious diseases in the long term. Such historical

20. Buzan, Waever, de Wilde 1998: 31.
21. Buzan, Waever, de Wilde 1998: 31.
22. Buzan, Waever, de Wilde 1998: 25.
23. Searle 1969.
24. Buzan, Waever, de Wilde 1998: 31-33.
25. Buzan, Waever, de Wilde 1998: 31-33.
26. Vuori 2008.
27. Davies 2008: 297.
28. Curley and Herington 2011: 162.
29. Baringer and Heitkamp 2011.

perspective helps, thus, to emphasize similarities and differences between the "emerging diseases worldview" and earlier medicine and public health ideologies, thereby showing that the link between national security concerns and public health is not new.[30] Distinctions are made between "sovereign state security" developed in the 17th century and calling for the protection of territorial sovereignty against foreign armies, "population security" emerging in the 19th century and resting on the idea of protecting the national population against domestic threats and, finally, "vital systems security" central to the contemporary politics of security in the domain of health, whose objectives of protection are the essential structures governing social and economic life.[31] While an approach to infectious diseases in terms of population security generates preventive measures, considering such a health challenge as an issue of vital systems security generates preparedness initiatives.[32] However, these two types of measures are profoundly different. Developed in the 19th century, prevention policy notably relies on an extensive and scientific understanding of specific infectious diseases and on the probability of contemporary outbreaks. In this context, preventive measures which aim to protect the population are materialized by public health initiatives or developmental measures against poverty.[33] Conversely, preparedness, as an "emergency modality of intervention,"[34] deals with generic health events of very low probability and uses fictions to reinforce its legitimacy: it is instead materialized by measures which aim at addressing vulnerabilities in health infrastructure, such as the strengthening of multi-level disease surveillance systems, the development of scenario-based exercises,[35] the production of vaccines or the stockpiling of medicine. In that way, preparedness measures are implemented with the objective of strengthening the capacity of a country to respond to any potentially catastrophic biological event.[36]

Finally, regarding the outcomes of the contemporary securitization process of infectious diseases, positive and negative impacts have been underlined in academic literature. Indeed, on the one hand, it has been illustrated that securitizing a particular disease may raise the profile of the disease,[37] helps

30. King 2002.
31. Collier, Lakoff 2006: 2-3.
32. Lakoff 2007: 25.
33. Lakoff 2008: 106.
34. Collier, Lakoff 2013: 14.
35. Lakoff 2008: 404; Zylberman 2013: 145-149.
36. Collier, Lakoff 2008: 17.
37. Davies 2008: 297.

to mobilize human and financial resources to a level that other framing would not be able to reach and represents a critical approach to responding efficiently to epidemics.[38] However, on the other hand, scholars have also pointed out that securitizing a disease may divert limited resources to one specific health problem and away from others. It might also run against the preventive risk management strategy that is needed to address infectious diseases, by stimulating a preference for preparedness measures. Finally, it has also been emphasized that such a securitization process contributed to international virus-sharing disputes between developing and developed countries, as in the case of Indonesia's decision in December 2006 to cease sharing its H5N1 virus samples in the name of national security.[39]

In this article, we propose to use both approaches complementarily in order to assess the securitization of SARS and H5N1 in Taiwan. Taiwan is an interesting case, as the country was very close geographically to the epicenter of the SARS and H5N1 outbreaks and, at the time, neither belonged to nor had observer status at the WHO. In deconstructing the dynamics of securitization of SARS and H5N1 in Taiwan, we intend to shed light on their securitizing actors, their referent objects and the rhetoric used to present both diseases as existential threats. The objective of this study is also to appreciate the material and ideational outcomes of such securitization in terms of exceptional measures and of infectious disease management. Finally, this contribution aims to reveal the motivations—or facilitating conditions—behind the securitization of these two infectious diseases, as well as the cost and benefits of such actions.

Securitization of infectious diseases in Taiwan: SARS and H5N1 as case studies

The Taiwanese breeding ground for infectious diseases securitization

In the 1960s, Taiwan, the United-States and the WHO[40] shared the optimistic idea that infectious diseases were being increasingly well managed.[41] This general conviction, which continued until the beginning of the 21st century, was supported by a real decrease in the incidence of infectious diseases such as tuberculosis, Japanese encephalis and hepatitis A in Taiwan,

38. Ramiah 2006: 162.
39. Elbe 2010.
40. Zylberman 2013: chap. 1.
41. *China Yearbook editorial Board* 1961: 636; *China Yearbook editorial Board* 1962: 678.

as well as the eradication of bubonic plague (1948), filariosis (1955), rabies (1959), cholera (1964), typhus (no reports of any cases since World War II), smallpox (1965), malaria (1965)[42], diphtheria (1981) and poliomyelitis (1985) on the island thanks to the progressive reconstruction of the Taiwanese public health infrastructure—notably supported by the United States—[43] and the implementation of preventive measures. This optimism was further reinforced by the recognition of these successes by the international community, particularly the United-States (the US Agency for International Development (USAID)[44] and the US Congressional Taiwan Caucus),[45] WHO,[46] APEC[47] as well as think-tanks such as the Center for International Development at Harvard.[48] As an institutional consequence of such confidence in the fight against infectious diseases, the network of infectious disease control in Taiwan was largely replaced by a disease control system mainly dedicated to chronic diseases.

Interestingly, in this context of general optimism in Taiwan, neither HIV/AIDS which increased from 9 to 5,650 cases between 1984 and 2003 nor the augmentation of tuberculosis infecting 15,042 people in 2003 (11,591 cases in 1996) convinced the Taiwanese authorities to consider the rise of infectious diseases as a problem, even if some scientists started to point out the necessity of doing so.[49] However, the Enterovirus 71 (later abbreviated to EV71) crisis in 1998 changed the situation and represents a turning-point for two main reasons. First, with 78 deaths, the EV71 crisis was more visible internationally than HIV/AIDS or tuberculosis. As a consequence, foreigners started to criticize the official response to the crisis and to question the capacity of Taiwan to deal with infectious diseases in general.[50] Second, the Taiwan Department of Health asked the US CDC (Centers for Disease Control and Prevention) for assistance in monitoring and controlling the outbreak.[51] After several meetings between the delegation and Taiwanese authorities to discuss control measures and after criticism by the US CDC on the disorganization of the infectious

42. Lin and Liu 2010: 183-203.
43. See Michael Liu's contribution on malaria eradication in Taiwan in this volume.
44. Jacoby 1966: 107-108.
45. US Congress 2001.
46. WHO recruited numerous Taiwanese experts on tuberculosis, malaria and dengue fever to work as advisers between 1960 and 1972.
47. APEC 2001: 6.
48. Gallup and Sachs 1998: 6.
49. Huang 1994.
50. CNN 1998.
51. US CDC 1998.

diseases control system in Taiwan—particularly the lack of autopsies, which made it impossible to know whether the victims actually died of the EV71[52]—some changes indicate the progressive acceptance by the Taiwanese authorities of the "emerging diseases view" supported by the CDC.

First, a Taiwan CDC was created on July 1st, 1999 to enhance the management of epidemics in Taiwan, and replaced a number of institutions charged with disease control: the Bureau of Communicable Disease Control (BCDC), the National Quarantine Service (NQS) and the National Institute of Preventive Medicine (NIPM), all vividly criticized during the EV71 crisis for their lack of coordination.

Second, after 1998, Taiwan reinforced its enterovirus surveillance capacity by strengthening its national diseases surveillance structure, until then based only on a sentinel surveillance system. Taiwan then developed a website version of the notifiable disease surveillance system (1999), a school-based surveillance system (2001) and a syndromic surveillance system (2002) which confirmed a move to disease surveillance that is a characteristic of preparedness, in contrast to other public health methods focusing on the surveillance of diagnosed individuals.[53] Taiwanese health authorities also actively started epidemiological research and vaccine development with an EV71 prototype vaccine, conducted training for health professionals to improve diagnoses, cures and preventative methods against enterovirus infection, and encouraged behavioral changes such as frequent hand washing.

The second dynamic for infectious diseases securitization in Taiwan is the link between biological war, bioterrorism and the (re)-emergence of infectious diseases. Concerns in Taiwan about a biological attack started during the Cold War in the context of the development of biological weapons in China and was still evoked by the Ministry of National Defence in 2000[54] as well as by the President of Taiwan, Chen Shui-bian[55] and by the director-general of the CDC in 2002.[56] Two anthrax attack false alarms in October 2001 took place just one month after an anthrax incident in the United States (September 18, 2001). At the same time, bioterrorism was at the center of the discussions at the fourth emergency high-level National Security Meeting held after the September 11th

52. CNN 1998.
53. Fearney 2005: 5.
54. *Taipei Times*: April 13, 2000.
55. Government Information Office, Taiwan: 2002. Conditions of the election of Chen Shui-bian as President of Taiwan and the tense relationship with China will be specifically presented in the third part of this article.
56. Twu Shiing-jer: 2002.

attacks, was considered by the CDC to be a national defense issue and was the topic of numerous academic articles.[57] In the "2002 National Defense Report" published by the Ministry of National Defense, a section was dedicated to the presentation of a mechanism of epidemic management whose main objective was to protect those Taiwanese soldiers considered key for national security against any outbreak of infectious diseases.[58]

Thus, thanks to progressive acceptance by Taiwanese officials of the "emerging diseases worldview" and the construction of a direct link between infectious diseases and national security in the context of the response to biological warfare, bioterrorism and outbreaks of infectious diseases within the Taiwanese army, a breeding ground was prepared to facilitate the securitization of emerging diseases such as SARS and H5N1.

Framing SARS as a national security issue

SARS was first identified in China in November 2002 and entered Taiwan *via* a traveler from that country on March 15, 2003. Then the disease spread in two stages. During the first period, from March 15 to April 19, 2003, 78% of probable cases were travel-related, 16% occurred in households and among social contacts of SARS cases and 6% were hospital-acquired.[59] With the support of the US CDC, who sent experts to Taiwan on March 16 following a request from the Taiwanese government to the WHO, Taiwanese authorities succeeded in containing the epidemic as a first step. As a symbol of this success, the first International Symposium on SARS was organized in Taipei (April 21) and gave the opportunity to the authorities to share their victory with representatives from the international community. However, ironically, on the day after the event, the epidemiological situation worsened following the misdiagnosis of a patient infected with SARS at the Taipei Municipal Hoping Hospital.[60] From that day (April 22) to the end of May, with seven outbreaks of SARS in different medical institutions in northern and southern Taiwan, the second phase of the spread of SARS in the country was characterized by the fact that 89% of cases were hospital-acquired, 9% travel-related and only 2% community-acquired.[61] On April 27, Taiwan had its first SARS fatality, while the total number of SARS cases reached 339. On May 3, the WHO decided

57. For example: Kuo, Chuang 2002; Lin, Wang 2002.
58. Ministry of National Defense 2003: 318-320.
59. WHO/CDS/GSR/GAR 2003: 23.
60. Predecessor of the Taipei City Hospital's Heping Fuyou Branch.
61. WHO/CDS/GSR/GAR 2003: 23.

to send two experts to Taipei. After the implementation of various epidemic control measures, the spread of SARS was finally halted at the beginning of June 2003 after more than 600 Taiwanese had been infected by the disease since its arrival in the country. The outbreak killed 81 people. After containing what has been called the "Chinese syndrome" or the "21st century's first great epidemic,"[62] Taiwan was finally declared a "Sars-free zone" by the WHO on July 5.

In Taiwan, the process of securitizing SARS started very quickly after the announcement of the first case in the country. Among the main actors of this social construct, President Chen Shui-bian was certainly one of the first to securitize SARS publically. Indeed, in early April 2003, during his opening remarks to the International Seminar on Asia-Pacific Cooperative Security, President Chen stated that SARS should be considered "with the same urgency applied to the defense of national security."[63] Then after April 21, with the growing number of SARS cases in the country, the disease obtained the official status of an issue of national security. A few days after the first SARS-related death in Taiwan, President Chen convened a 'High-Level National Security Meeting on SARS'on May 1, 2003. During this meeting, he announced a number of policies with the intention of defending what was then considered a major potential victim of a SARS epidemic, namely the State. The measures related to epidemic control, public morality, industrial and economic ties between Taiwan and China, and wider international cooperation.[64] Indeed, while protecting the health of the general population was mentioned during the meeting, the main objective of the measures adopted was to protect the State and more precisely the key infrastructure, critical to maintaining economic and political order, notably by assisting industries seriously affected by SARS, reducing panic among the public through transparent communication and strengthening the capacity of hospitals to deal with the disease. Simultaneously, in a context of international concern over Taiwan's response to SARS,[65] control measures recommended by WHO and US CDC teams during their visit to Taiwan were scrupulously implemented by Taiwanese health authorities. Thus, health authorities closed all SARS-affected health-care facilities to new admissions, restricted visiting to the affected facilities and implemented universal temperature screening and monitored staff absences. They also asked that patients discharged from such facilities during the incubation period

62. Greenfeld 2007.
63. Office of the President, ROC (Taiwan) April 4, 2003.
64. Office of the President, ROC (Taiwan) May 1, 2003.
65. *Taipei Times* May 11, 2003; *BBC News* May 18, 2003.

should be notified of the need for fever monitoring, restricted the transfer of patients between health-care facilities and assembled Taiwan CDC teams to conduct on-site investigations.

Furthermore, health authorities reinforced the national epidemiological surveillance of SARS by granting it notifiable disease status, ran public campaigns to accelerate the diagnosis and reporting of people showing symptoms. They also raised public awareness of respiratory hygiene and appropriate health-seeking behavior in cases of a persistent fever and/or a dry cough, implemented exit screening at air, land and sea borders and issue health advice in writing to departing passengers.[66] Methods recommended by the WHO but whose effectiveness were unproven were also implemented, such as the closure of department stores.[67]

The unprecedented Presidential initiative which officially granted SARS the status of a national security issue also stimulated several exceptional measures aimed at responding to what was then considered an existential threat to Taiwan's national security. A special NT$ 50 billion (€ 1.25 billion) budget supporting the country's anti-SARS campaign was approved by the Legislative Yuan: it was the first time that such a giant budget plan had cleared the legislative floor (and in only eight days of debate).[68] The money was mainly dedicated to strengthening Taiwan's preparedness capacity: a very small amount directly targeted the "security of the population." NT$ 29.8 billion (€ 745 million) was injected for SARS-preparedness efforts and related medical expenses and NT$ 20.2 billion (€ 505 million) to combat the economic impact of the outbreak. Within this budget, NT$ 2 billion (€ 50 million) was reserved for the National Science Council to conduct medical research into the disease, including the development of vaccines and other medicines. The exceptionality of such initiative is also manifest when its total budget is compared to the NT$ 3 billion reserved for the prevention and control of HIV/AIDS, which then infected around 6,000 people.[69]

Another illustration of these exceptional measures is without doubt the official decision to use quarantine as a public health tool to prevent infectious diseases, notably because other preventive interventions (*e.g.*, vaccines and antibiotics) were unavailable. Indeed, after March 18, anyone who had been in close contact with a SARS patient was quarantined for 10-14 days. At the end of April, in response to the growing epidemic, Taiwan health authorities

66. Twu 2003; WHO 2004.
67. *Taipei Times* May 18, 2003.
68. *Taipei Times* May 23, 2003
69. Taiwan CDC 2003.

implemented a more widespread use of quarantine and by the end of the health crisis, 131,132 people had been quarantined in Taiwan.[70] People under quarantine were required to stay in the immediate locality to where they were diagnosed, monitor their temperature, and seek medical attention if they had fever or other respiratory symptoms. There were various levels of confinement, and depending on these, sufferers could leave quarantine only for activities authorized by the local health authorities such as seeking medical attention, exercising outdoors and purchasing food. They were not allowed to use public transport, visit hospital patients, or crowded public places and had to wear surgical masks when around other people and when outside the quarantine site. The high-security aspect of such measures was reinforced by the introduction of a fine of between US$ 1,765 and US $8,824 and the risk of incarceration of up to 2 years in cases of non-compliance with quarantine regulations including submitting incomplete SARS survey forms or inaccurate contact information. Police officers were stationed outside the quarantine facilities in order to ensure compliance. Little sign of resistance to these measures was noted, with only 286 people (0.2% of those quarantined) being fined for quarantine violations.[71] Taiwan was one of several countries that implemented quarantine measures during the global SARS outbreak. Not only do such initiatives, which clearly demonstrate state power in time of crisis[72] remain extraordinary in the sense that they place "limitations on otherwise inviolable rights,"[73] namely the freedom of movement in a democracy such as Taiwan, they are also generally considered as an archaic method of protecting public health.[74]

Parallel to the exceptional measures detailed above, other atypical and smaller scale initiatives have also fed into the impression of a close and direct link between SARS and Taiwan's national security, notably due to their nature or the resources they mobilized. Among these measures, one can mention the mobilization of 1000 soldiers, 150 members of the military police, as well as 55 special military vehicles used for disinfection by the Taiwan Ministry of National Defense in order to help the country control the spread of SARS.[75] The Ministry of National Defense's interventions on the epidemic were closely followed by the Taiwanese media through the 24 hour TV news programs and the print media. The government chose the military-run Institute of Preventive

70. US CDC 2003.
71. US CDC 2003.
72. Tseng, Wu 2010: 267.
73. Buzan, Waever, de Wilde 1998: 24.
74. Zylberman 2013: 396.
75. *Taipei Times* May 30, 2003; Taiwan Governmental Information Office (GIO) 2005.

Medical Research to develop a vaccine against SARS[76] and the Songshan Armed Forces Hospital (affiliated to the Ministry of National Defense) became the first hospital devoted to treating and caring for SARS patients.[77] At that time, the TV news and newspaper pictures showing military-uniformed nurses caring for SARS patients were reminiscent of those seen in times of war.

Finally, to illustrate this securitizing environment, one could certainly mention the daily televised Taiwan Department of Health press conferences, similar to those organized by the US and UK military forces during the Iraq war which occurred around the same time. During these routine events, measures taken by the government were presented as the weapons in a "war against the enemy" (*Yichang duikang diren zhanzheng*).

The securitization of SARS in Taiwan relied on the fact that the President and government of Taiwan (securitizing actors) presented SARS to the public as an existential threat to national security—notably to vital systems security—(referent object) and concluded that the situation necessitated strong action (exceptional measures) in order to prevent and contain the disease. These extraordinary measures were truly and sustainably implemented and largely accepted by the target audiences, namely the members of the Legislative Yuan for the approval of the special SARS budget, and the citizens who had been in close contact with SARS patients for the quarantine. The securitization of SARS also reveals the increasing prominence given to "emerging diseases" by Taiwanese government officials and, in the light of the control and the preparedness measures taken in response to the disease, it also confirms the progressive acceptation in Taiwan of the "emerging diseases worldview" promoted by the US and the WHO. As we will now see, these two dynamics were amplified by the securitization of H5N1.

Granting H5N1 national security issue status

With the exception of Brunei, Singapore and the Philippines, all Taiwan's neighbors have been affected by H5N1 since 2003 and at least nine Asian countries have reported human cases of the virus. However in Taiwan no human cases of H5N1 have been identified so far, even though the country possesses very close trade and touristic relations with most of the infected countries in Asia.

Nevertheless, the possibility of an H5N1 outbreak in Taiwan has not been ignored by health authorities. As an illustration, in March 2005, 42 deaths

76. *Taipei Times* May, 14 2003.
77. Chou 2010.

attributed to H5N1 in neighboring countries prompted the Taiwan CDC to declare that "a bird-flu epidemic is (just) a matter of time"[78] and, in March 2006, when an H5N1-related death was reported in Southern China, the Department of Health (DOH) chief Hou Sheng-mou declared that "the threat of bird flu is approaching the gates of Taiwan."[79]

Taiwanese health authorities continued to promulgate this alarming message[80] which at one and the same time raises the potential of an H5N1 outbreak in Taiwan and proclaims the fact that there had been no human cases of H5N1 in the country due to the efforts of the health authorities.

In such a context, H5N1 was considered a security issue in Taiwan from August 19, 2005, when President Chen Shui-bian convened a new National Security Council meeting to discuss a prospective analysis published by the US CDC predicting 14,000 Taiwanese deaths in the event of an H5N1 outbreak and calling for stronger preparedness measures.[81] On October 31, 2005 and March 9, 2006, President Chen convened the second and third High-Level National Security Council meetings on avian flu, which he described as "a serious threat to both social stability and national security."[82] He explained in 2006, during a videoconference with European officials:

> My administration attaches great importance to the prevention of avian flu. I personally convened a high-ranking national security conference in August 2005 to discuss issues related to avian flu. Since then, we have convened two more national security conferences to discuss this important issue, which is to say, that the Taiwan government has upgraded the issue of avian flu epidemic prevention and control to the national security level.[83]

In its 'Strategy plan for the execution of an influenza pandemic response,' the Department of Health classified avian flu as "a non-traditional security threat" and warned that an outbreak of H5N1 would not only represent a catastrophe for public health and for the agricultural sector, but also "a great threat to social stability and national security."[84] Moreover, Council of Agriculture (COA) Chairman Lee Chin-lung underlined that "avian flu control has been raised to

78. *Taipei Times* March 12, 2005.
79. *China Post* March 11, 2006.
80. *Taipei Times* January 11, 2006.
81. *Taipei Times* August 19, 2005.
82. *Taipei Times* November 1, 2005.
83. Office of the President, ROC (Taiwan) May 19, 2006.
84. Taiwan CDC 2012a: 152.

a national security level"[85] and the representative to the European Union and Belgium and former senior advisor of the National Security Council, Michael Kau Ying-mao, explained that "our experience with SARS a few years ago helped us to learn how to manage a public health emergency and we consider avian flu as a threat to national security."[86]

The decision to respond to the potential spread of H5N1 as a national security issue engendered several preparedness measures aimed at protecting Taiwan's "vital infrastructure." Indeed, as for SARS, a special and impressive budget of NT$ 30 billion (€ 751 million) supporting avian influenza control measures was accepted without any disagreement from the opposition-dominated Legislative Yuan.[87] While concerns about a potential outbreak of H5N1 in Taiwan certainly motivated such immediate support from the Yuan, the fact that the government also argued for the budget on its multi-disease coverage and "dual-use"—as it would simultaneously help to strengthen Taiwan's response to bioterrorism—certainly helped convince the Yuan that even if there was no H5N1 outbreak in Taiwan, the budget wouldn't be a waste of money. To appreciate the exceptionality of such a financial initiative, it might be revealing to highlight that in 2005 the DOH invested NT$ 416 million in cancer prevention, the leading cause of death in Taiwan since 1982.[88]

After the inclusion of H5N1 as a notifiable disease in Taiwan (December 2004) and the adoption of the H5N1 budget, preparedness measures recommended by the WHO and the US CDC were strictly implemented in Taiwan within the framework of the five-year National Influenza Pandemic Preparedness Plan (2005). Systems for the surveillance of populous institutions and information collection for infectious diseases were added to the national disease surveillance system. The capacity of critical structures such as hospitals to control nosocomial diseases and avian flu was also strengthened through training health professionals and increasing the quality and number of negative-pressure isolation rooms. Furthermore, a National Health Command Center (NHCC) (*Guojia weisheng zhihui zhongxin*), largely inspired by the US Health Command Center, was created within the Taiwan CDC in 2005 in order to unify the national response to major man-made and natural epidemics.

Fruit of some exceptional initiatives, stockpiling antivirals was another weapon in the Taiwanese preparedness arsenal against H5N1. Indeed, in October 2005, Taiwan had enough Tamiflu to cover only 4% of the population

85. *Taipei Times* November 19, 2005.
86. *The Parliament Magazine* April 9, 2007.
87. Chiang 2005.
88. Bureau of Health Promotion, DOH 2005.

at a time when the WHO recommended coverage of such a stockpile should be 10%. As the government was concerned about Roche's effective production and dispensing capacity of at a time of global pandemic, the DOH sent a request to the Swiss company—then the only producer of such an antiviral—for a secondary license allowing Taiwanese private companies working with the National Health Research Institute to mass-produce Tamiflu to increase the country's stockpiles as a precautionary measure against a potential avian flu pandemic.[89] Having not received a positive answer from Roche and in order to prove both domestically and internationally that Taiwan was able to produce such a drug, the DOH, which had one month earlier asked the Taiwan National Health Research Institute (NHRI) to evaluate the possibility of producing Tamiflu in small quantities, announced on October 18, 2005 that Taiwan was able to develop a generic version of Tamiflu which was 99.9% identical to Tamiflu.[90] During the second national security meeting on avian flu,[91] the President of Taiwan declared the making and stockpiling of antiviral drugs to be 'the work of utmost important regarding the disease'. One day later, on November 1, the DOH submitted an application for a compulsory license[92] to the Taiwan Intellectual Property Office (IPO) to obtain the authorization to manufacture a generic version of Tamiflu locally without the consent of the patent holder, as is allowed under WTO regulations in the context of medical emergencies.[93] While waiting for answers from the IPO and from Roche, the DOH decided to purchase three tons of shikimic acid, a product made in China essential in the manufacture of Tamiflu.[94] Finally, at the end of November 2005, Roche had still not answered the Taiwan DOH's request, and after receiving the authorization from the IPO, Taiwan health authorities decided to use the "compulsory license" in order to produce their generic Tamiflu and reach the recommended coverage level of 10% of the population. However, in order to prevent damage to Taiwan's image in the protection of intellectual property rights, the authorization to manufacture this anti-viral drug without the consent of Roche was only accepted by the IPO under several

89. *China Post* October 18, 2005.
90. *Taipei Times* October 18, 2005.
91. Taiwan Governmental Information Office (GIO) 2005b
92. According to the World Trade Organization, compulsory licensing is when a government allows someone else to produce the patented product or process without the consent of the patent owner. It is one of the flexibilities on patent protection included in the WTO agreement on intellectual property—the TRIPS (Trade-Related Aspects of Intellectual Property Rights) Agreement.
93. *China Post* November 1, 2005.
94. *Asia Times* October 29, 2005.

conditions. The compulsory license was limited to domestic use and effective to the end of 2007. Furthermore, Taiwan could only start production of Tamiflu when its stocks and those ordered from Roche were depleted.[95] In fact, Roche provided Taiwan with additional doses of the anti-viral in 2006, which allowed the country to cover 2.3 million people (10% of the whole population). By the end of 2007, Taiwan was free of H5N1; it thus did not need the Tamiflu that the government had in its stock, and local mass-production of a generic version of Tamiflu was never launched. It is noteworthy that the decision to issue a compulsory license for Tamiflu is exceptional. Taiwan was the first country to have employed such a mechanism to ensure sufficient stockpiles of the drug in case of a pandemic.

Consistent with the preparedness approach, which in contrast with classic public health uses imaginative techniques to simulate potential health threats, the Taiwanese government also conducted table-top exercises based on various catastrophic scenarios in order to reveal and address weaknesses in its critical infrastructure.[96] Thus, major flu epidemic training exercises were held in Pingtung County by the CDC in 2006 and 2007 in conjunction with the Wan-Ann Military Exercise organized by the Ministry of National Defense and within the framework of a cooperation agreement between that Ministry and the CDC. The CDC also organized the "Egret Number 1" flu-exercise to test the off-shore medical care system based on serious H5N1 influenza pandemic scenarios with high fatality levels.[97]

Similarly to what had occurred during the SARS episode, the above events confirmed the H5N1securitization process. Indeed, this virus—for which there were no human cases reported in Taiwan—had been considered and presented as an existential threat to national security—more precisely to Taiwan's vital systems security—by the Taiwanese authorities who consequently decided and implemented, without domestic resistance, exceptional preparedness initiatives.

Facilitating conditions and consequences of the securitization process of SARS and H5N1 in Taiwan

Facilitating conditions: domestic politics and international factors

95. *Taipei Times* November 26, 2005.
96. Collier and Lakoff 2013: 14.
97. Taiwan CDC 2007: 47.

Securitization theorists use the term facilitating conditions for factors explaining the acceptance of a specific concern as a security issue. Looking at such conditions might help us to understand why SARS and H5N1 have been securitized while diseases whose morbidity and mortality incidences are higher, have never been considered security issues, as well as to appreciate the origins and incentives behind such an approach.

While President Chen Shui-Bian was in a position of authority to talk about security, as he represented, at that time, the highest authority in Taiwan, other factors facilitated the securitization process of these two diseases. Domestic politics is one of these factors. In 2000, the election of Chen Shui-bian of the Democratic Progressive Party (DPP) and former mayor of Taipei, ended more than fifty years of Kuomingtang (KMT) control of the government whose political legitimacy rested notably on its capacity to bring economic prosperity to the country through the rapid industrialization and economic growth in the 1970s and 1980s. During his presidential campaign, Chen Shui-bian promised to consolidate Taiwan's democracy, to fight corruption and to defend fair and open social welfare policies, and also pledged to pursue economic development and to raise Taiwan's economic competitiveness. This last pledge was often ridiculed by the KMT and a survey in 2000 showed that only 12.3% of the respondents considered that Chen was the most competent candidate to deal with economic growth while the KMT candidate, Lien Chan, reached 35.7%. In other words, although legitimated by the ballot box through universal suffrage, Chen and his government had also to gain political legitimacy through economic growth. Before SARS broke out in Taiwan on 22 April 2003, Chen Shui-bian's government had actually been successful in keeping to its economic objectives, as Taiwan's economic growth had reached 3.54% (-2,1% in 2001, 3.2% in 2002) making Taiwan the second-fastest growing of Asia's dragon economies after South Korea.[98] Furthermore, Chen Shui-bian and the DPP were already involved in the campaign for the next presidential election, which would be held eleven months later (March 20, 2004). In this political context, with SARS cases being reported in Taiwan and economic forecasts revealing that the outbreak could damage the whole economy[99] and tarnish his presidential mandate, Chen Shui-bian decided to grant this specific health issue the status of an issue of national security. This was also intended to influence the 44.1% of voters in 2000 who still thought that he was not the most competent person to deal with the issue of economic growth.[100] In

98. Council for Economic Planning and Development (CEPD) 2003: 4
99. *Taipei Times* April 26, 2003; *Taipei Times* April 29, 2003; *Taipei Times* April 30, 2003.
100. Niou and Paolino 2003: 726.

other words, political legitimacy and electoral strategy also motivated the securitization of SARS.

Similarly, domestic politics also played a facilitating role in securitizing H5N1. In August 2005, when H5N1 had been officially granted the status of an issue of national security, Chen Shui-bian had also been reelected—by less than 30,000 votes—and while the global economy had entered a phase of slower growth, Taiwan's economy remained on a path of stable growth reaching an annual rate of 4.1%.[101] The DPP government had thus proved that it was able to provide sustainable economic growth in Taiwan as Chen had promised in 2000 and repeated during the 2004 presidential campaign. However, at that time, Chen and his government knew that the forthcoming local elections (December 2005) would be a real test for them as the rate of unemployment was rising and a series of scandals had tarnished the DPP's image. The threat of the outbreak of a disease devastating Taiwan's economy—as was forecast by numerous economists in Taiwan and abroad—led Chen and his government to take exceptional measures, showing their determination to protect Taiwan's vital infrastructure and people against this potential pandemic and at the same time reassuring the voters about the efficiency of their policies. The only mechanism which could allow the rapid acceptance by the Legislative Yuan and the implementation of such initiatives was to make H5N1 an issue of national security. In other words, even though the DPP was later replaced by the KMT as the largest party at a local level, securitizing H5N1 during the post-election period was an electoral strategy by the government with the aim of strengthening its image of being in control of the situation and convincing voters to support its candidates in the local elections.

International politics, characterized by the will to clearly differentiate Taiwan from China (PRC), has also played a crucial role in this dynamic. Furthermore, considering pandemics as threats and not as risks, amounted to attributing the responsibility of such a health event to an identifiable source and not to consider its occurrence as an unintended consequence of global, regional or local dynamics.[102] Indeed, SARS was clearly and repeatedly identified as originating from mainland China by Taiwanese authorities.[103] SARS was presented by President Chen as "an imported disease" from China,[104] its presence in Taiwan as similar to the existence of Communist

101. Council for Economic Planning and Development (CEPD) 2006.
102. Beck 1999; Giddens 1999.
103. Rich 2005: 71-73.
104. Department of Health 2003.

Chinese spies in the country, according to the DOH,[105] and its occurrence on the island was explained by Chen as the direct result of a Communist Chinese cover-up of the epidemic.[106] Such identification of the PRC as the source of the disease was repeated in the context of H5N1 when President Chen painted China as a "black-hole in the global effort to prevent avian flu"[107] and when Mainland Affairs Council Vice-Chairman Liu Te-Shun explicitly stated that the lack of transparency in China's epidemic disease information on H5N1 was jeopardizing Taiwan's disease prevention efforts and was putting the health of the Taiwanese people at risk.[108] While this deliberate choice to accuse the PRC as the source of both epidemics does not come as a surprise from a pro-independence president such as Chen Shui-bian or for government officials affiliated to the DPP, it helped to stir Taiwan nationalism both among DPP supporters and elsewhere and to reinforce the images of an authoritarian PRC versus democratic Taiwan. Interestingly, by contrast, in 2013, the KMT government and President Ma Ying-jeou did not frame H7N9 as an issue of national security, but as a risk. At the same time the Taiwan Solidarity Union (TSU, *Taiwan tuanjie lianmeng*), a political party advocating Taiwanese independence, did express the necessity of doing so.[109]

Framing SARS and H5N1 as issues of national security was also a way for Taiwan, who was not and still is not a member of the WHO, to reinforce its identity at the global level. Indeed, by following this international trend of securitizing emerging diseases, by reforming its epidemic control infrastructure and developing its strategies in reference to what has been done by the US CDC—itself a global institution—and by scrupulously implementing the control and preparedness measures recommended by the WHO in response to SARS and H5N1, Taiwan has identified itself as a member of the global health security community.

Consequences of the securitization process of SARS and H5N1 in Taiwan

In the case of the securitization of SARS and H5N1 in Taiwan, three main and direct consequences of such an approach can be underlined.

First, it had an institutional effect. Indeed, the framing of a health issue as a national security issue actually invited the Department of Health—which was

105. *China Post* April 1, 2003.
106. *BBC News* March 30, 2003.
107. *Taipei Times* March 10, 2006.
108. *Taipei Times* March 2, 2008.
109. Taiwan Solidarity Union (TSU) 2013.

then not even a full Ministry – and its affiliated agencies, such as the CDC, to play in the yard of "high politics." This opportunity certainly helped the DOH to upgrade its institutional position within the government as well as its power relative to other ministries. This helped the DOH in its request to be granted a ministerial status and more recently (July 2013) in its expansion to become the Ministry of Health and Welfare.

The second important consequence of addressing these emerging diseases as an issue of national security and not as an issue of population security is the replacement of a logic of prevention for a logic of preparedness, focused on safeguarding the security of Taiwan's vital systems security. In other words, SARS and H5N1 have profoundly changed the way Taiwan responds to epidemics. The progressive acceptance of the preparedness approach by Taiwanese officials in dealing with epidemics is revealed by the institutional health reforms introduced after the 2003 SARS outbreak (creation of a Taiwan CDC, strengthening the national epidemiological surveillance system) as well as by the measures implemented to keep Taiwan free from H5N1 (training health professionals, table-top exercises, stockpiling Tamiflu and a vaccine research program). This approach was confirmed in the National Influenza Pandemic Preparedness Plan and in the Influenza Pandemic Strategic Plan whose main objectives are according to the CDC, to minimize the death toll, economic losses and the impact of new influenza viruses.[110] Such choices raised questions about their consequences in terms of the respect of human rights in Taiwan in the case of a major epidemic, given the fact that experience in Taiwan and elsewhere reveals how the protection of national security can easily be used to legitimate unfair, non-transparent, invasive, punitive and forced measures.

The third consequence touches on Taiwan's foreign policy in relation to health. Indeed, following the securitization process of SARS and H5N1, Taiwan has implemented several new overseas health initiatives. These have been motivated by the idea that the threat to Taiwanese national security represented by a pandemic might be attenuated through external activities such as epidemic control in the countries where outbreaks of infectious diseases have already occurred.[111] Such an approach was coherent with the emerging diseases campaign discourse which was convinced that assisting other countries to face health-related challenges was in the national/regional interest of the helping country/regions.[112] Within the framework of such an approach,

110. Taiwan CDC 2012b: 35.
111. Rollet 2010.
112. King 2004: 75-76.

in 2005 Taiwan started to send medical teams—physicians, epidemiologists, laboratory scientists, vector control specialists and epidemic investigators—to countries where avian flu had occurred, and in doing so brought assistance and guidance in epidemic preparedness and control. Thus, Taiwan sent health specialists to Burkina Faso and Chad in 2006 to help these two diplomatic allies manage H5N1[113] and donated preventive materials (Tamiflu and protective masks) to Vietnam and Ghana in order to strengthen their H5N1 prevention capacities.[114] Considering such pre-emptive measures as a success, the DOH institutionalized them through the establishment of the Global Outbreak Assistance Corps of Taiwan or GOACT (*Jingwai fangyi dadui*) in June 2007, whose main objective is to improve Taiwan's disease prevention capabilities and to pursue the strategy of "epidemic prevention before domestic outbreak."[115] Considered as the main actor in Taiwan's "preventive diplomacy against infectious diseases,"[116] GOACT has since sent its teams worldwide to participate in disease prevention operations against infectious diseases (Haiti, Indonesia), has closely monitored specific diseases (H1N1 in Hong Kong, China and Mexico) and shared surveillance information with other countries (Australia)[117]. Such initiatives are not dissimilar to—and have even been inspired by[118]— the initiatives taken by the US CDC Global Disease Detection and Emergency Response Division and the European CDC to monitor infectious diseases worldwide and to send epidemiological teams abroad to assist foreign countries in outbreak response and preparedness activities with the aim of preventing health crises anywhere in the world that might have an impact on the United-States or the European Union.[119]

Conclusion

In response to outbreaks of SARS and H5N1, the Taiwanese authorities decided to consider these two diseases as national security issues, as had been done by other countries in the global context of securitizing of infectious diseases. Encouraged by its capacity to generate large popular support as well

113. *Taipei Times* April 8, 2006; *Le Progrès* June 14, 2006.
114. Thanh Nien News July 22, 2005; Department of Health 2008: 117
115. Taiwan CDC 2008: 65-68; Department of Health 2008b.
116. Hou 2007.
117. Taiwan CDC 2011: 66-67
118. Taiwan CDC 2008: 65-66
119. US CDC 2012: 4 and 33; ECDC 2006: 8.

as significant funding, the Taiwanese government saw securitization as an opportunity to increase awareness in national identity, make electoral gains and strengthen political legitimacy at the domestic level as well as enhance Taiwan's national identity at the international level.

The aim of protecting Taiwan's national security in the context of SARS and H5N1 led to the application of exceptional measures, and also provoked a profound change in the way epidemics are managed in Taiwan. The preparedness measures developed and implemented were very different from the preventive measures previously used in the country when faced with such health challenges. At the same time, such a change also illustrates how an international norm—epidemic preparedness—originating from the US and largely promoted worldwide by the US CDC and the WHO has been integrated into official Taiwanese strategies against epidemics, and then how such institutions with global reach influence health strategies on a national level. However, given the narrow focus and the negative consequences such a national security approach may have on human rights, finding an alternative response to the threat of an epidemic in a democracy such as Taiwan represents the next challenge in the domain of epidemic control.

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